

Ecological Reserves

Five-year Report to the Legislature
April 1, 1994 – March 31, 1999

Outstanding examples of Manitoba's
unique sites and landscapes.

Protecting
& Managing
our Future

Manitoba
Conservation



Table of Contents

Executive Summary	1
Introduction	2
Map of Existing Ecological Reserves	3
Program Overview	4
Status of Commitments Made in Previous Five-year Report...	4
Program Administration	5
Ecological Reserves	6
Reporting Period Activities.....	6
Research Activities	7
Voluntarily Protected Areas	8
Reporting Period Activities.....	8
The Next Five Years	9
Appendix: Comments Provided by the Ecological Reserves Advisory Committee on the Five-year Report	10

Photo Credits

Most photos used to illustrate individual ecological reserves on the map on page 3 came from Ecological Reserves Program slide files. Most are current and former staff of Manitoba Conservation or its predecessor departments such as Natural Resources. Jack Dubois of the Manitoba Museum of Man and Nature provided the cave photos, pages 3 and 5 and Karen Johnson, also of the Museum and former member of the Ecological Reserves Advisory Committee, took the photo of Baralzon Lake Ecological Reserve, page 3

Cover Photo: Aerial View, Palsa Hazel Ecological Reserve within Grass River Provincial Park.

To His Honour
The Honourable Peter M. Liba
Lieutenant Governor of Manitoba

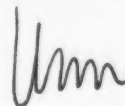
Your Honour:

I am pleased to present the Five-year Report to the Legislature on Ecological Reserves for the period April 1, 1994 to March 31, 1999.

Three new ecological reserves were designated during the past five years, bringing the total to 16 since Manitoba's first ecological reserve was established in 1976. During the reporting period, the Ecological Reserves Advisory Committee recommended four new candidate areas and forwarded them for consideration by the Minister responsible for ecological reserves. They are under review for designation.

New commitments have been made in the past five years regarding the need to protect representative and unique portions of Manitoba's natural heritage. Ecological reserves set aside outstanding examples of Manitoba's unique sites and landscapes.

Yours sincerely,



Oscar Lathlin
Minister

To the Honourable Oscar Lathlin
Minister of Conservation

Sir:

I am pleased to provide the Five-year Report to the Legislature on Ecological Reserves for the period April 1, 1994 to March 31, 1999. The report provides an overview of the status of the Ecological Reserves Program and describes activities that have taken place during this period.

Ecological reserves comprise one of several designations in the network of protected areas administered by the Manitoba Conservation. As Manitoba's most protected provincially designated areas, ecological reserves set aside outstanding examples of ecologically unique sites and landscapes.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'N. Brandson', with a stylized flourish extending to the right.

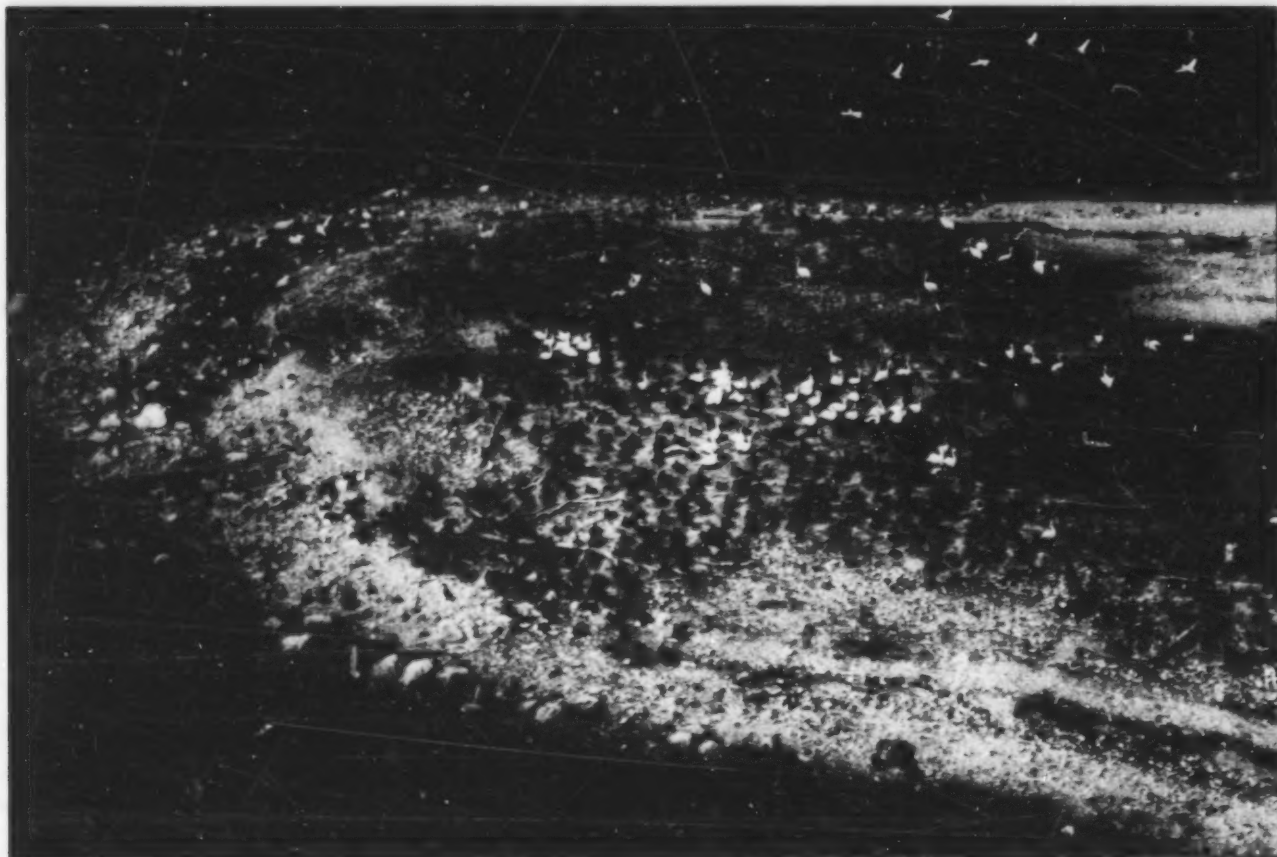
Norman B. Brandson
Deputy Minister

Executive Summary

Manitoba's system of ecological reserves consists of sites established under *The Ecological Reserves Act*. Ecological reserves are the most protected of the provincially designated sites within the network of protected areas in Manitoba. As such, they play a unique role in meeting society's commitment to set aside a significant and representative portion of our land base in its most natural state, free from intensive recreational development or resource harvest.

During the reporting period, more than 50 sites were identified to the Ecological Reserves Advisory Committee as possible ecological reserves. By the end of the reporting period, four of these were submitted to the minister, while eight others were nearing final review.

To date, 16 ecological reserves (totalling 60,425 ha) have been designated. Three of these - Lake St. George Caves, Palsa Hazel, and Whitemouth Island - were created during the reporting period.



*Double-crested Cormorants and American White Pelicans,
south end of Reindeer Island Ecological Reserve.*

Introduction

The Five-year Report to the Legislature is a requirement of an amendment to *The Ecological Reserves Act*, assented to December 22, 1989. The act calls for a report every five years presenting information about the status, management and use of ecological reserves. This is the second such report; the first was distributed to Members of the Legislative Assembly on July 25, 1995.

This report updates the status of ecological reserves, and it discusses trends and changes over the past five years.

Small Bellwort
(*Uvularia sessilifolia*)



Dutchman's Breeches
(*Dicentra cucullaria*)

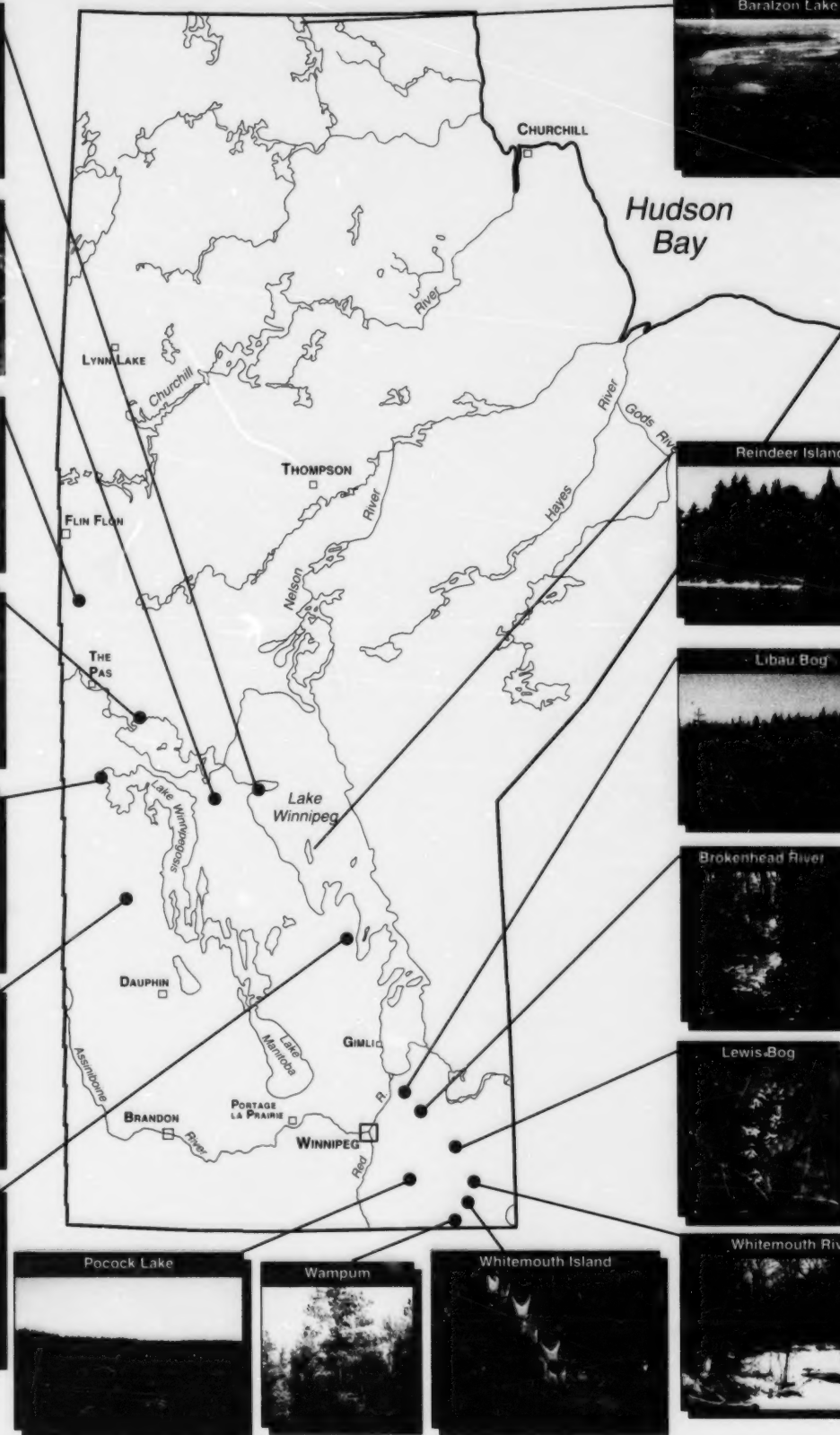
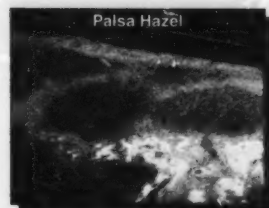
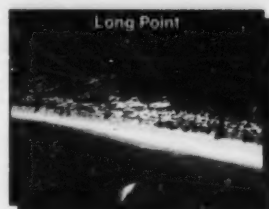


Nodding Trillium
(*Trillium cernuum*)



Three rare Manitoba plants, Whitemouth Island Ecological Reserve. These plants are more common in the Great Lakes St. Lawrence Region of Canada.

Existing Ecological Reserves



Although Manitoba's Ecological Reserves Program is now one component of the province's Protected Areas Initiative, the Ecological Reserves Program began much earlier than the Protected Areas Initiative. Ecological reserves grew out of the world-wide effort to inventory shrinking natural resources as part of the International Biological Program (IBP). Canada joined the IBP in 1964 and sites in Manitoba were surveyed from 1968 to 1973. Manitoba's Ecological Reserves Program began in 1973, and our first ecological reserve was established in 1976.

Ecological reserves can only be established on Crown land. They preserve unique and rare natural features of the province and examples of natural and modified ecosystems. Ecological reserves may be used for research, education and nature study, but they are not set aside as recreational, resource harvest, or multiple use areas. As a result, ecological reserves now fill the special role of being the most protected category of designated provincial lands in the network of protected areas.

Ecological reserves directly support key elements of many national and international commitments and agreements to set aside unique and representative examples of the earth's biodiversity and landscapes. These include:

- (a) the 1989 World Wildlife Fund Canada Endangered Spaces Campaign,
- (b) the June 1992 United Nations Convention on Biodiversity, and
- (c) the November 25, 1992 federal-provincial-territorial "Statement of Commitment to Complete Canada's Network of Protected Areas".

Several policy initiatives and documents dealing with all types of protected areas including ecological reserves were developed and distributed during the reporting period. In March 1994, the first document, "*An Action Plan for a Network of Special Places for Manitoba*", was released. In January 1997, Cabinet approved a second Action Plan entitled: "*An Action Plan for Manitoba's Network of Protected Areas 1996-98*". This document updated the earlier action plan, and reaffirmed the provincial commitments to set aside in protected areas, adequate examples of Manitoba's biodiversity by preserving unique and representative landscapes. In March 1998, a Memorandum of Understanding on establishment of new protected areas was signed with Manitoba First Nations organizations. The memorandum requires consultation with affected First Nations communities before new protected areas are established, and outlines the principles to be followed. All of these policy initiatives and documents focus on all types of protected areas, not just ecological reserves.

Until 1993, ecological reserves were the only provincially designated lands that met the requirements of the World Wildlife Fund Canada Endangered Spaces Campaign for protected areas, that is, areas that are legally protected from intensive industrial, recreational and agricultural development. Since then, efforts on Manitoba's Protected Areas Initiative have had two major priorities. First, existing provincially designated lands were reviewed to see if they could be given legal protection. As a result, by the end of the reporting period, over 80 percent of the provincial park system is now protected, as is a large portion of the Wildlife Management Areas system, especially in southern Manitoba. Second, during the reporting period, the Protected Areas Initiative also focussed on establishing large protected areas to represent landscapes which were still considered inadequately represented in existing protected lands. As a result, efforts to establish new ecological reserves continued slowly, in part because ecological reserves have many more constraints on uses and activities than other protected areas.

Status of Commitments Made in the Previous Five-year Report

The previous Five-year Report to the Legislature on Ecological Reserves indicated that work during the 1994-1999 reporting period would include (a) development of a system plan for ecological reserves, and (b) examination of ways to enhance the role of private lands in preserving ecologically significant areas.

Work on drafting an ecological reserves system plan began by developing a set of guidelines on what types of areas to consider as ecological reserves in consultation with the Ecological Reserves Advisory Committee. Once the guidelines were developed, the Committee considered it more important to give priority to receiving and compiling nominations of candidate sites for committee review and recommendation, rather than to spend the limited staff and committee time available on developing planning documents. Accordingly, the guidelines were used, but a system plan report for ecological reserves was not completed.

With passage of the *Conservation Agreements Act* in 1997, new opportunities have been provided for enhancing the role that private lands could play in preserving and protecting ecologically significant areas. Procedures on implementing this act were being finalized at the end of the reporting period.

An Ecological Reserves Advisory Committee, appointed under the *Ecological Reserves Act*, provides advice to the Minister of Conservation regarding the establishment of ecological reserves and their stewardship. Under the act, the Committee sets its own rules of procedure. The act also outlines the four principal duties of the committee. In accordance with the act, the minister has requested the committee to:

- (a) examine, inspect and recommend on the suitability of candidate areas;
- (b) receive, consider and recommend on submissions from the public;
- (c) provide or make available to the public and government, information on ecological features and ecologically significant areas in Manitoba, and
- (d) advise on administration of the act.

Membership of the committee changed during the reporting period. In April 1994, the committee had five members. One person resigned in January 1995; a replacement was appointed effective October 1996, and another member resigned in July 1997. The committee had four members at the end of the reporting period. The committee met 13 times during the reporting period with meetings held about every two months beginning in June 1997.

Responsibility for administration of the Ecological Reserves Program rested with the Parks and Natural Areas Branch during the entire reporting period. The Director of Parks and Natural Areas is also designated as

Director of Ecological Reserves pursuant to the *Ecological Reserves Act*. The branch provides secretariat support to the Ecological Reserves Advisory Committee, with one individual designated Secretary to the Committee. The branch also provides general administration of the program including management and direction; liaison with staff of other branches and regional staff of Manitoba Conservation and with other government agencies and departments; program planning; policy and procedure formulation and implementation; legislation development; and budget co-ordination, allocation and control. With the expansion of the Protected Areas Initiative, the branch also undertakes the consultations with the First Nations, forestry and mineral sectors and others on sites submitted to the minister by the committee for consideration as ecological reserves.

Proposals for development activities (road upgrades, forest harvest, gravel pits, etc.) are screened to ensure that they do not impinge on existing or proposed ecological reserves recommended to the minister, or on voluntarily protected lands. For example, information on then-existing and candidate ecological reserves formed part of the licensing process under the *Environment Act* for the Tolko Manitoba Inc. Forest Management Licence Area. The final *Environment Act* License conditions issued for Tolko in October 1998 prohibit forestry activities within both designated and proposed ecological reserves.



Little Brown Bats (*Myotis lucifugus*), St. Georges Cave hibernaculum,
Lake St. George Caves Ecological Reserve.

Manitoba's Ecological Reserves Program dates from 1973. The first ecological reserve was created in May 1976. Since then, fifteen more ecological reserves have been established, bringing the total area covered by ecological reserves to almost 60,500 ha (Table 1). Ecological reserves may only be established on Crown land. The first four ecological reserves were established under *The Crown Lands Act*. Passage of the first *Ecological Reserves Act* in 1981 led to all subsequent ecological reserves being established under this legislation.

The *Ecological Reserves Act* governs what activities are allowed in ecological reserves. As Manitoba's most protected areas, prior approval from the Minister of Conservation is required to conduct any activity in an ecological reserve. General Ministerial Orders, however, allow people to enter and travel through most ecological reserves on foot without need to obtain a specific permit. Hunting is prohibited in ecological reserves; however in Baralzon Lake Ecological Reserve, native people can continue traditional uses including hunting. Proposals for scientific research and management activities in ecological reserves are reviewed by the Ecological Reserves Advisory Committee before being submitted to the minister for a decision.

Ecological reserves can be natural and/or disturbed areas. They are intended to preserve unique and representative plants, animals and geological features, natural landscapes and ecological processes. They are also intended to serve as outdoor laboratories for studying basic biological activities. Ecological reserves, therefore, are not intended to be recreational areas. Rather, they are set aside to preserve biodiversity while allowing some use under permit for research, education and nature study. Thus, ecological reserves are considered the most protected provincially designated sites in Manitoba's network of protected areas.

Reporting Period Activities

Three ecological reserves were established in the past five years. Palsa Hazel Ecological Reserve in Grass River Provincial Park and Lake St. George Caves Ecological Reserve near Hodgson were both initially proposed in 1989, and designated in 1997. Whitemouth Island Ecological Reserve in Whitemouth Lake in southeastern Manitoba was investigated in 1993, and designated just as the reporting period ended. These three sites demonstrate the extremely long time that it usually takes to create an ecological reserve, from initial recommendation by the committee to designation. This long delay is in part due to the extensive restrictions on activities and uses in ecological reserves. Consulting all

parties who have an interest is complex and time consuming.

Palsa Hazel Ecological Reserve was established to protect a relict permafrost feature in Grass River Provincial Park. Palsas occur near the southern limit of discontinuous permafrost. They are peat mounds 1.5 to 6 m high and up to 100 m in diameter with a frozen peat core. Palsa Hazel Ecological Reserve is located in a wetland complex that contains fens, peat palsas and palsa scars.

Lake St. George Caves Ecological Reserve in Manitoba's Interlake contains at least eight caves. One of the caves is the site where the largest-known number of bats hibernate overwinter in the province. All caves in the ecological reserve have a variety of unique geological features and formations.

Whitemouth Island Ecological Reserve is in Whitemouth Lake in southeastern Manitoba. It contains mature deciduous forest communities representative of the Great Lakes-St. Lawrence Forest Region of Canada. At least eight species of eastern deciduous forest plants considered rare in Manitoba grow here. Record or near-record sized specimens of trees, shrubs and climbing vines also grow on Whitemouth Island. This site was designated, following consultations with, and the support of, the nearby Buffalo Point First Nation.

During the reporting period, Director of Surveys Administrative Plans were prepared for most of the ecological reserves that did not have a plan. Using the plans and other new digital technology, the area covered by each ecological reserve was recalculated, as presented in this report.

In the summer of 1994, the Ecological Reserves Program funded biological investigation of the southern Porcupine Mountain escarpment, an area suggested for consideration as an ecological reserve. Two sites near Birch River were studied.

In 1998, staff of Manitoba Natural Resources and Manitoba Environment investigated a biologically rich, calcareous fen in the Beaconia area north of Winnipeg that has been suggested for ecological reserve consideration.

In mid-1997, the Ecological Reserves Advisory Committee began to meet more regularly. The committee began to focus on the need to move more sites toward designation as ecological reserves. The committee began by identifying sites from personal experience and by soliciting nominations from

Ecological Reserves

Knowledgeable Manitoba naturalists, scientists and others. Over 50 sites were compiled. These were then tabulated and prioritized for action. Nominations for individual sites were drafted on an ongoing basis. Committee members provided initial drafts of nominations for sites with which they were familiar. In addition, during the last half of 1998, the Manitoba Co-ordinator, World Wildlife Fund Canada provided volunteer support to the program to help compile data and prepare initial drafts of four nominations for the committee's consideration.

During the reporting period, the Ecological Reserves Advisory Committee reviewed, approved and recommended four new candidate sites as ecological reserves to the Minister of Natural Resources, the minister then responsible for ecological reserves. One of these was the Porcupine Mountain escarpment area surveyed in 1994. In addition, nominations for seven other sites were nearing completion, and more than 40 sites remained on the list of candidates.

Over the years, the committee has expressed concerns about an insufficient level of support for the program, and the slow pace of progress on both drafting of nominations and achieving designations. The

Ecological Reserves Advisory Committee has reviewed a draft of this Five-year Report and offers its own comments in an Appendix included at the end of this report. The Appendix has been included as submitted by the committee.

Research Activities:

Research projects were undertaken in one ecological reserve during the reporting period. Lake St. George Caves Ecological Reserve was designated in April 1997, in part based on the results of about a decade of research on bat ecology co-ordinated by staff of the Manitoba Museum of Man and Nature. These studies documented that one cave in a complex of caves is the largest known hibernaculum, where bats overwinter in the province. Bats banded here have been recaptured in summer throughout southern Manitoba and as far north as Nelson House, as well as throughout northwestern Ontario. Following designation of the area including the caves complex as an ecological reserve, permission has been requested annually since 1997 to continue the research. This request has been granted. The research has confirmed that this cave continues to be heavily used by hibernating bats.

ECOLOGICAL RESERVES

Year Name	Area Created	(ha)	Ecosystems represented and outstanding features
Baralzon Lake	1989	39600	low arctic tundra, lakes and rivers, rare arctic plants
Brokenhead River	1978	64	mixedwood river bottom forest
Cowan Bog	1983	518	spruce bog and associated lakes, rare orchids
Kaweenakumik Islands	1989	63	used by colonial nesting birds and caribou
Lake St. George Caves	1997	49	caves in limestone karst, largest known Manitoba bat hibernaculum
Lake Winnipegosis Salt Flats	1992	573	saline flats and gradients, open freshwater lake, spruce forest
Lewis Bog	1987	569	fen, rare orchids
Libau Bog	1989	180	black spruce/tamarack bog, floating sedge bog, orchids
Long Point	1987	1837	beach ridges and bogs, eastern white cedar, burned July 1988
Palsa Hazel	1997	1648	permafrost features: palsa mounds and scars in unfrozen wetlands
Pocock Lake	1982	157	transition from upland ancient beach ridge to bog lake
Red Rock	1979	502	white spruce beach ridge and marsh, northernmost bur oak
Reindeer Island	1976	13860	mature upland forest and bogs on island in Lake Winnipeg
Wampum	1978	62	remnant mature red pine stand
Whitemouth Island	1999	613	deciduous eastern forest with several Manitoba rare plant species
Whitemouth River	1986	130	mixed forest, distinct lowland riverbank species

Voluntarily Protected Areas

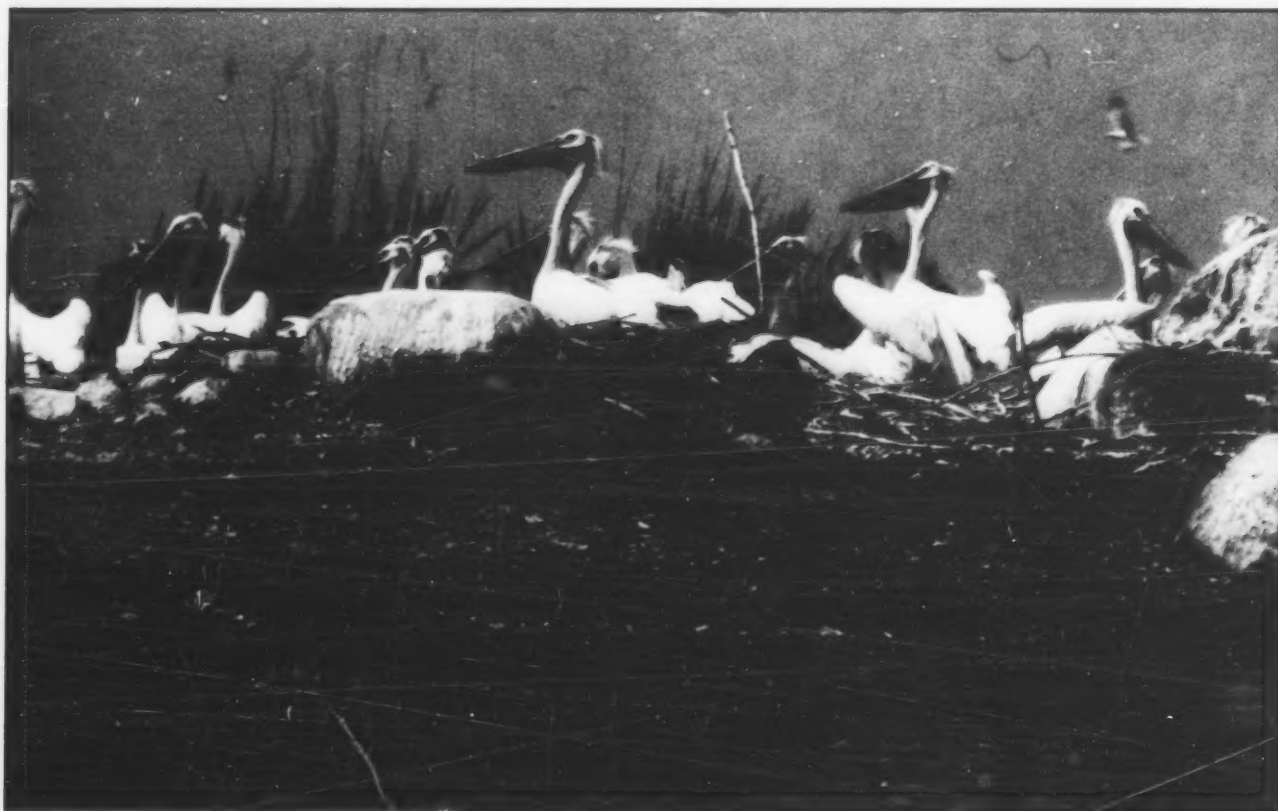
In 1987, the Ecological Reserves Program was expanded to recognize formally ecologically significant sites that were voluntarily protected by the landowner or land management agency. At that time, there was no legal means for private landowners to permanently protect their lands without giving up ownership. Ecological reserves were the only provincially designated lands where industrial activity was legally prohibited.

Reporting Period Activities

During the reporting period, the Voluntarily Protected Areas Program was largely dormant. It has now effectively been discontinued due to two new initiatives that provide alternatives to the Voluntarily Protected Areas Program. First, during the 1990s, many jurisdictions in Canada considered legislation allowing legal protection of private lands. In 1997, Manitoba joined this group with passage of the *Conservation Agreements*

Act. This act came into force July 1, 1998, and it began to be implemented actively as the reporting period ended. Conservation agreements are legal instruments attached to a land title that bind future land owners from developing the land in ways contrary to the intent of the agreement. This mechanism allows for privately owned lands considered ecologically significant to contribute to the network of protected lands.

Second, since 1995, the Protected Areas Initiative has systematically screened designated provincial Crown lands. Many areas, including some that were voluntarily protected, have since been legally protected using legislation for provincial parks, wildlife, and provincial forests. Many additional areas still await screening. Establishment of these protected areas has in part recognized their ecological values, and has rendered redundant the process of voluntary protection of provincial Crown land.



Nesting American White Pelicans, Kaweenakumik Islands Ecological Reserve.

The Next Five Years

April 1, 1999 – March 31, 2004

To date, ecological reserves have been seen as the most protected provincially designated lands in Manitoba's network of protected areas. This special role will continue as part of the Protected Areas Initiative. As a result, the rate of progress on establishing new ecological reserves will likely continue to be considered extremely slow, because ecological reserves have so many constraints on uses and activities. In particular, consultations on establishment of ecological reserves will involve the many parties who currently have some interest in areas under consideration for designation as ecological reserves.

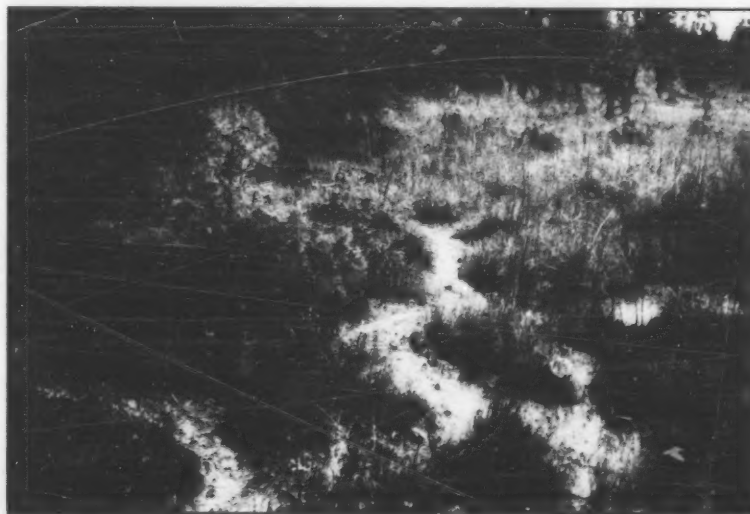
Sometimes consultations on areas recommended as ecological reserves by the Ecological Reserves Advisory Committee lead to protection via another designation. In such cases, their eventual protection should acknowledge their origins as candidate ecological reserves by implementing an appropriate designation and management regime that affirms their ecological significance.

Work will continue to recognize and document the ecological significance of areas throughout the province. New ways should be explored to integrate the use of protected areas legislation to provide ecologically meaningful protection of unique sites within a larger matrix of protected lands. For example, a core, highly protected, ecological reserve could be surrounded by other protected lands.

During the next five years, efforts will increase on better communication to the public and interested parties about the role that ecological reserves play in the network of protected areas. This will include development of an "ecological reserves" page on the Parks and Natural Areas Web site.

Ways will be evaluated to streamline the review and consultation process for proposed ecological reserves. Mechanisms for achieving interim protection will also be examined, while detailed discussions continue on site-specific protection so that opportunities for protection are not lost.

Although several wetlands have been established as ecological reserves, many other different wetland types, such as this calcareous fen, have been proposed as future ecological reserves.



COMMENTS PROVIDED BY THE ECOLOGICAL RESERVES ADVISORY COMMITTEE ON THE FIVE-YEAR REPORT

The Ecological Reserves Program was introduced in 1973 and provides the highest level of provincial protection for rare and unique wildlife, representative ecosystems, and special landscapes on Crown lands. In the intervening 27 years, only 16 Ecological Reserves have been established in Manitoba, an average of 0.6 per year. These reserves cover a total of 60,500 hectares, which is relatively insignificant (1.1 percent) when compared to those lands designated under other categories of the Protected Areas Initiative (5.27 million hectares). In contrast, 40 percent of total provincial lands are allocated for use by industry – forestry, mining, hydropower, agriculture, highways, and other developments. This low level of ecological-reserve representation fails to reflect the critical role of the Ecological Reserves Program in preserving Manitoba's natural heritage.

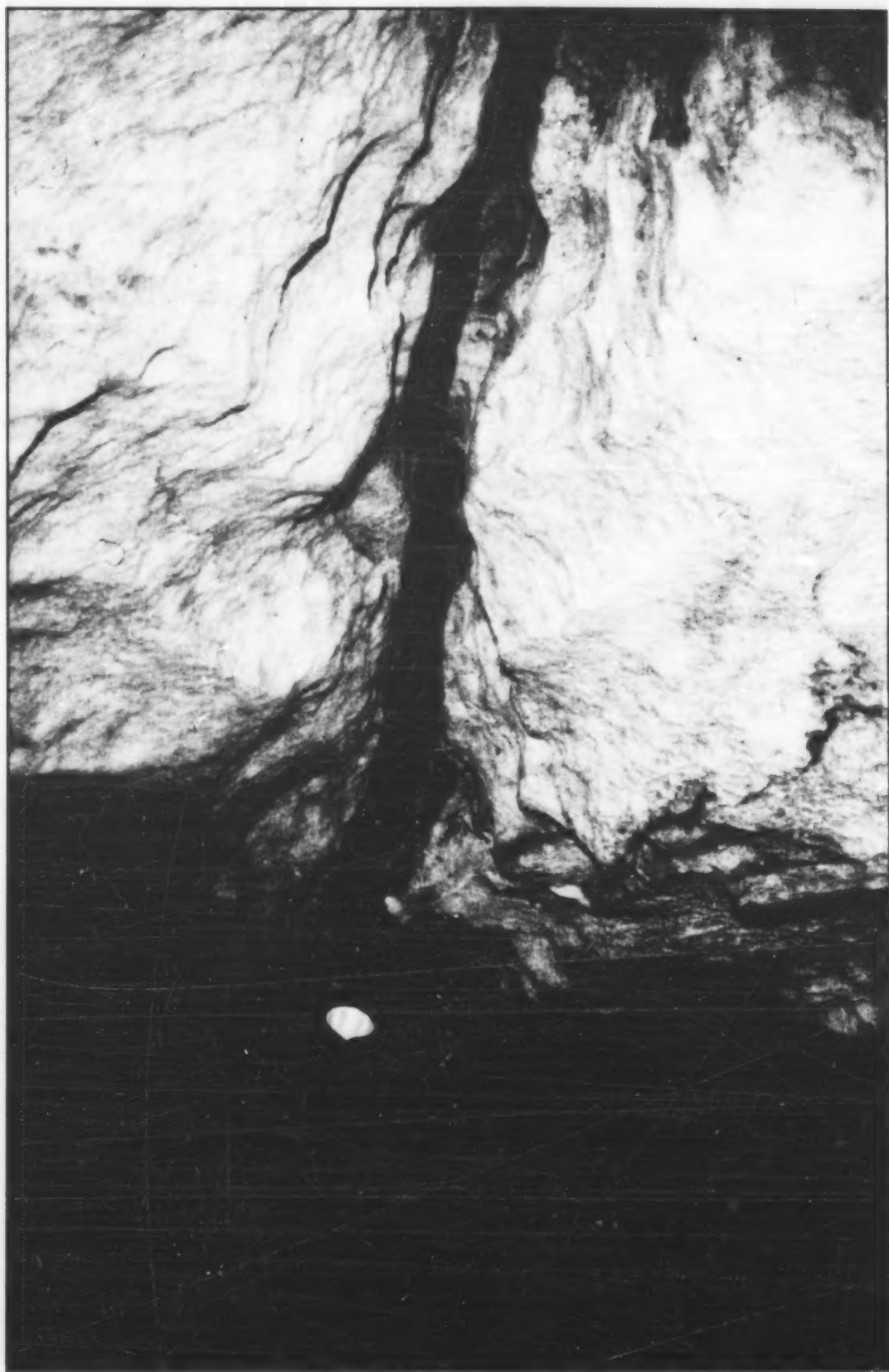
There exists a backlog of over 50 proposed sites, accumulated over a number of years from government departments, universities, private organizations and individuals. No action is currently being taken on the majority of these for lack of personnel to conduct field surveys and to prepare site reports.

Historically, the review-approval-designation process by government departments has taken two to 10 years, and several proposals are still outstanding after 12 years. This lengthy internal review procedure has seriously blocked progress of the Ecological Reserves Program. It has also subjected proposal sites to exposure to subsequent developmental claims and leases. The fact that numerous proposals for natural-resource development over vast lands are generally reviewed and approved at a significantly faster rate than those to establish small ecological reserves, means that the Ecological Reserves Program has fallen far behind in its mandate.

The committee commends the government for adopting the Geographic Information System (GIS), which has greatly expanded and improved mapping for the ecological reserves reports.

The committee strongly advises the Minister of Conservation to act on the following recommendations:

- Provide the Director of the Ecological Reserves Program with resources (i.e., staff time and contract funds) sufficient to operate the program.
- Evaluate the proposal review and approval process within the provincial government to ensure that proposals are handled expeditiously (i.e., within 18 months). The Director of the Ecological Reserves Program should spearhead the passage of proposals through the review process and inform the committee on the status of each proposal.
- Create a mechanism to prevent resource allocation and development in candidate ecological reserves while under review.
- Establish a five-year goal to review and designate annually 10 new ecological reserves.
- Establish a five-year goal to capture 5 percent of Protected Areas under ecological reserve status.
- Prepare and distribute a brochure on the Ecological Reserves Program to augment the Web site information and nomination form. Greater public knowledge about the Ecological Reserves Program will encourage support for conservation initiatives and generate new site proposals.
- Encourage closer liaison among the Ecological Reserves Advisory Committee, the Endangered Species Advisory Committee, and private conservation groups. This will help ensure that wildlife species at risk, and representative ecosystems and landscapes, are preserved within ecological reserves.



Geological feature, Cave, Lake St. George Caves Ecological Reserve.